



Annex B

Portable crane user's guide
FRH-2500 for ACT



All you need to know about
FRACO hydraulic platform

Portable crane user's guide FRH-2500 ACT rev.01 - 10/2004

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Congratulation!

You are about to use the excellent
FRACO hydraulic elevating work platform system!

FRACO provides you with the ultimate in
SAFETY, STABILITY, and FLEXIBILITY

While reducing your labor costs by up to 36%.

Due to the advanced technology of **FRACO Products**,
You can be assured of the **OPTIMUM QUALITY** in all our products

Total Quality.



FRACO is ISO 9001 registered

The instruction manual and safety rules presented on the following pages will safely guide you through all the possibilities of this system. The platform cannot be sold or rented without this user's guide.

FRACO Products Ltd., reserves the right to modify the platform or its manual without notice, and will not assume any responsibility for any prejudices that may occur.

FRACO's ACT portable crane system meets the **ANSI, OSHA, CE EN 1495:1997F**, requirements, except for the following points: ring and pinion.

Manufacturer



Les Produits FRACO Ltée
91 Chemin des Patriotes
St-Mathias-sur-Richelieu
Québec, Canada, J3L 6A1
www.fraco.com
fraco@fraco.com

Distributor



If you have any questions, do not hesitate in calling us at :

(450) 658-0094

Canada: 1-800-267-0094
Europe: +33 (0) 44.91.03.53
U.S.A.: 1-888-372 2948

Or fax us at: (450) 658-8905



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Part I

All you need to know – general information

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- Identification plate I-2
- General view I-3

Warning !

SAFETY IS OUR PRIMARY CONCERN.



For that reason, never remove or alter any part in order to adapt the platform to fit a specific area of the building.

USE ONLY FRACO GENUINE PARTS



PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

FRACO (and/or its importer/representative) cannot be responsible for any property damage, severe injury or death that may result from failure to comply with the following safety recommendations, local rules and regulations.

Before operating this FRACO System, the following safety rules must be read and completely understood:

- 1- Mark out with beacons and forbid access to area directly below the portable crane. This should be done according to the local rules..
- 2- If using a gasoline engine, do not work in a explosive surrounding such as refineries, etc....
- 3- Unauthorized use is not permitted. An authorized FRACO trainer must train you. The operator should be familiar with the user's guide and understand all the functions of this equipment.
- 4- Never assume anything. ! IF you have any questions concening the operation of the FRACO FRH-2500 hydraulic portable crane, STOP! Refer to the proper user's guide. If you are still unsure, do not continue and call FRACO immediately!
- 5- It's the responsibility of the operator to ensure that the maximum load permitted is respected.
- 6- If the warning on the equipment is damaged or missing, do not use and call your FRACO representative for a replacement.
- 7- This platform should be maintained periodically. Refer to user's guide.
- 8- In case of electric storm, LEAVE the platform.
- 9- For personal safety, when wind exceeds 50 km/h (30 mp/h) do not use, install or dismantle the platform. Make sure that the platform is lowered to the minimum.
- 10- Never replace any components or pieces without the manufacturer's authorisation.
- 11- This platform should never be used specifically as an elevator, lift or move personnel.
- 12- Before moving up or down, all persons are to be alerted
- 13- Do not carry load over people.
- 14- Do not jerk the winch. Always smoothly accelerate and decelerate the load.
- 15- Do not leave a suspended load unattended and never leave a load suspended for an extended period of time.
- 16- Maintain equipment in good operating condition. Perform scheduled maintenance regularly.
- 17- Warm-up equipment before operation, particularly at low ambient temperatures.
- 18- Portez toujours des vêtements appropriés pour éviter que les pièces mobiles les entraînent dans leur fonctionnement.
- 19- Do not lift the load with a twisted, kinked or damaged wire rope.
- 20- Keep hands clear from moving parts, especially when winding wire rope onto the winch drum.
- 21- Maintain three (3) wraps of wire rope on the cable at all times.
- 22- The load must be lifted vertically at 0° angle.
- 23- Verify that the pulley can turn easily and the raised load cannot be lowered by itself.
- 24- Do not install the Portable Crane on a freestanding platform.
- 25- The hoist cannot be higher than the last anchor when you raise the load

Always wear your safety harness when installing and dismantling the mast sections, the wall ties and when manipulating the planks when passing the wall ties.



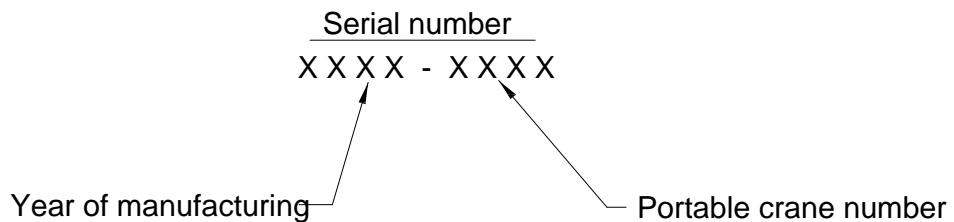
Safety harnesses that meet the local safety code must be available at all times for each person on the platform. A safety line, also conform to those codes and of sufficient length for the working height of the platform must be available at all times on the platform

Identification plate

This plate is placed on the side of the protective cab engine and must be visible at any time.



Fig.1



General view

Parts list	
Item #	Description
1	ACT elevating unit
2	FRH-2500 portable crane for 20 x 20 mast

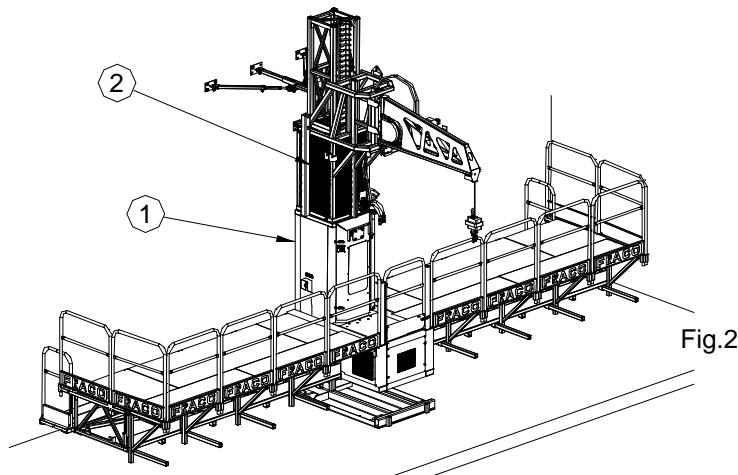
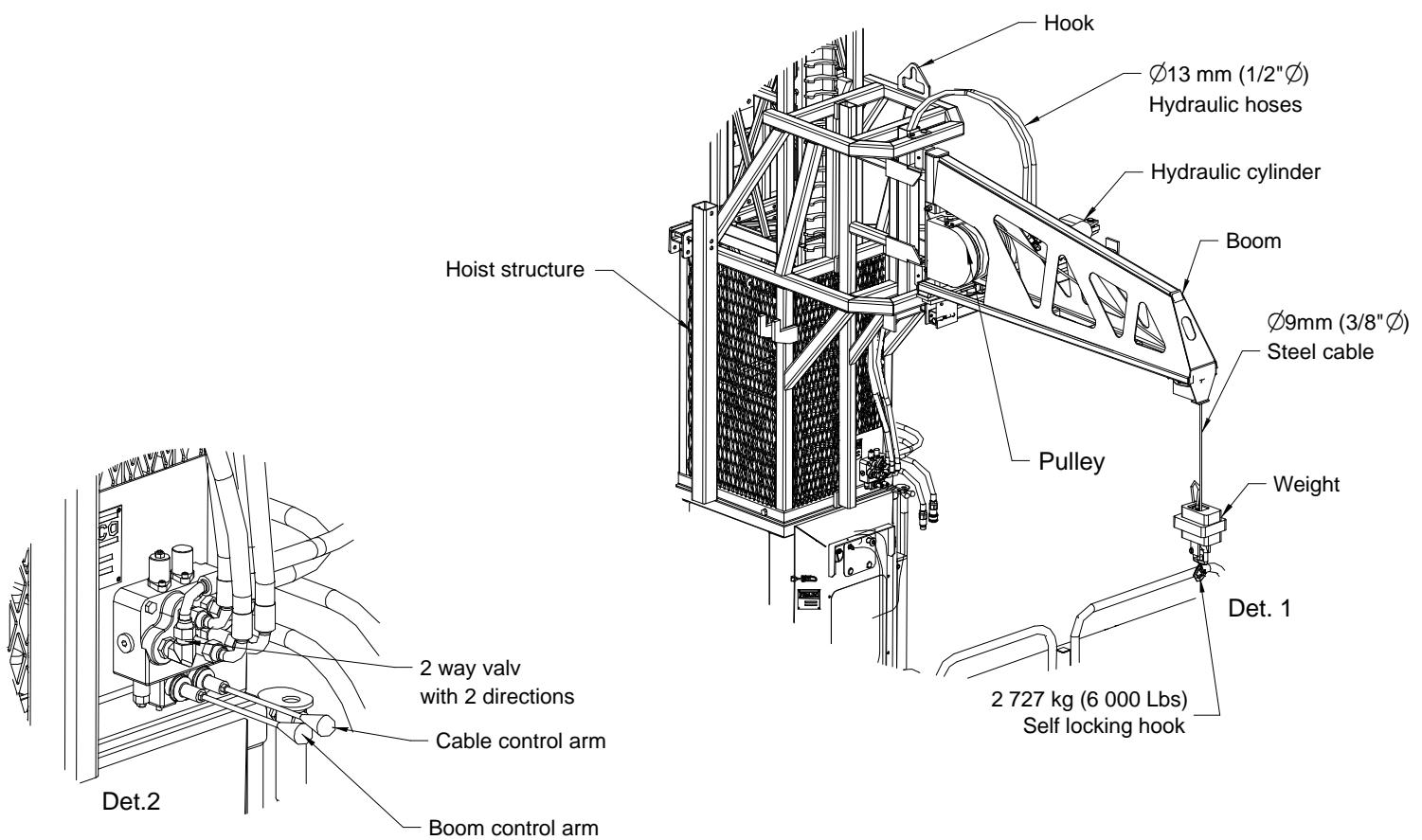


Fig.2





Part II

Installing / operating the portable crane

In this section:

• Portable crane installation.....	II-1
• Selector installation.....	II-2
• Hoses connection.....	II-3
• Control arms operation.....	II-4
• Loading the platform.....	II-5

Portable crane installation

It's important that the first anchor is already installed before proceeding with the portable crane installation.

Installation :

- 1-Use the portable crane hook to raise it to the top of the platform with a fork lift or boom truck.
- 2-Make sure the the elevating unit holes fit with the portable crane holes.
- 3-Secure it with bolts & nuts

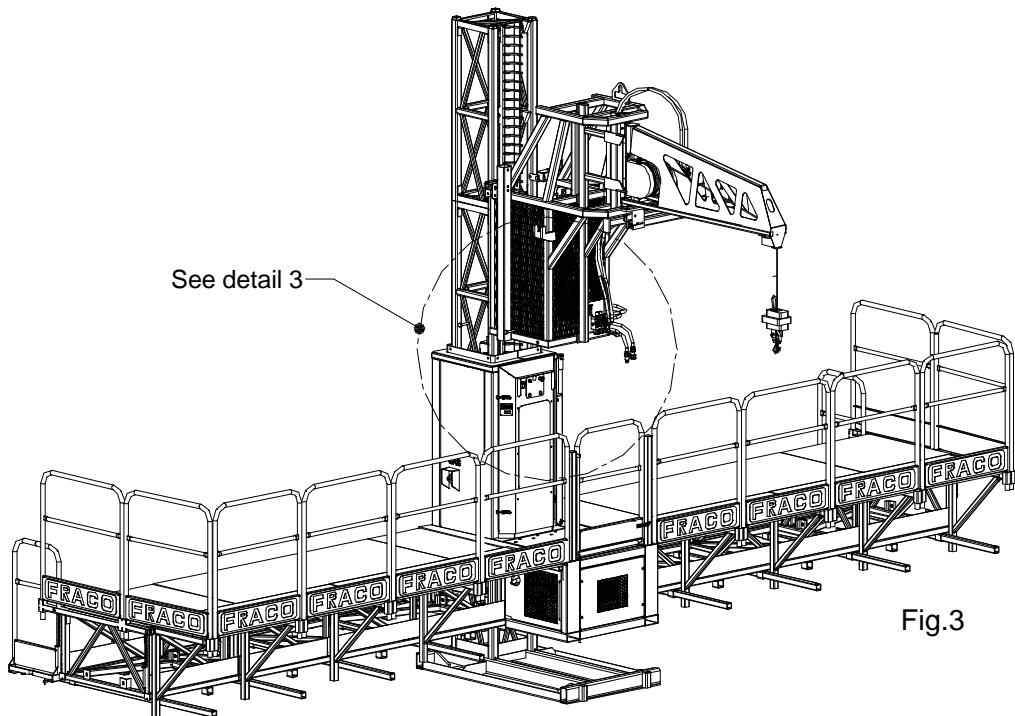
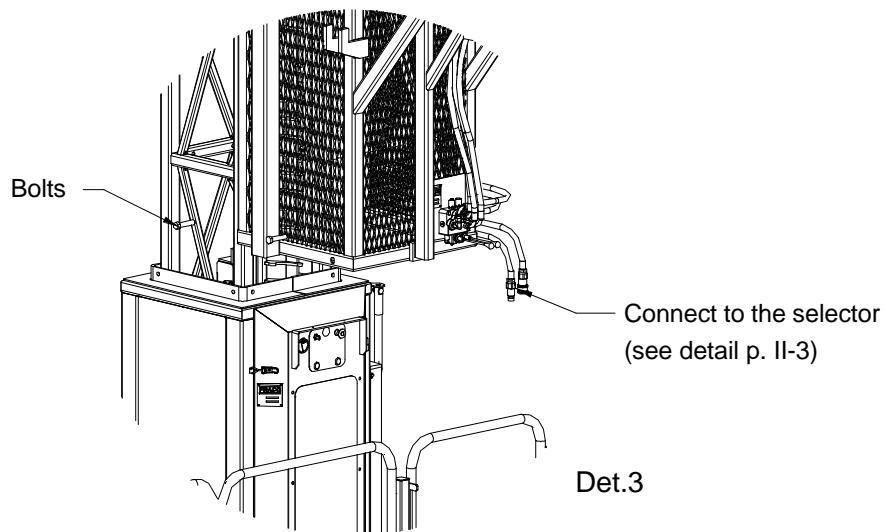


Fig.3



Det.3

Selector installation

Installation :

- 1-Lift motor cage cover. (Fig. 4)
- 2-Drill 4 holes. (Fig. 4)
- 3-Put the selector on the elevating unit and make sure that the selector component did not block or interfere existing motor components.
- 4- Connect all hydraulic hoses as describe. (Fig.5 p.II-3.)

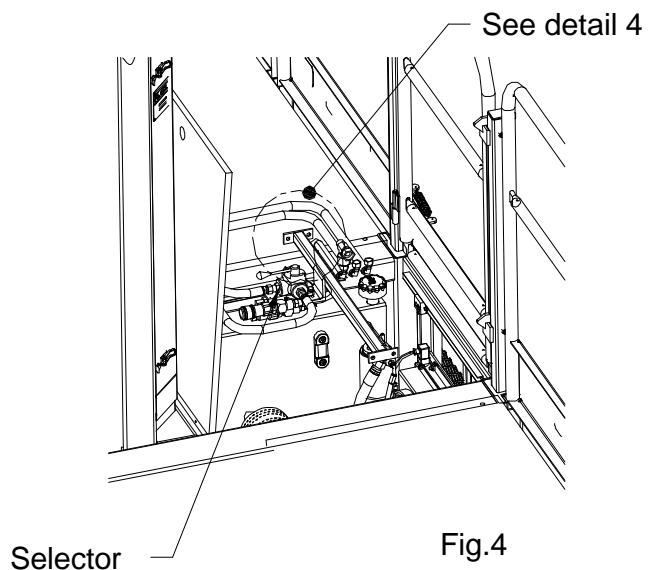
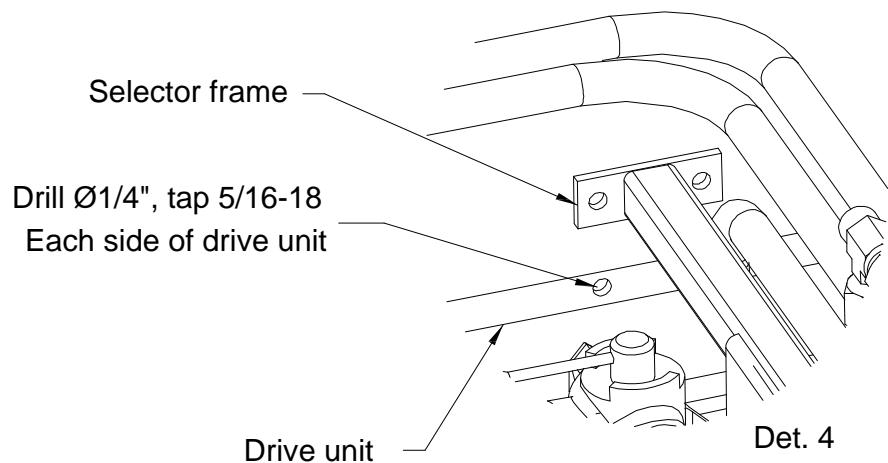


Fig.4



Hydraulic hoses connection

Installation

- 1-Connect hose « A »
- 2-Connect hose « B » on Motor pump
- 3- Connect hose « B » on Hydraulic radiator

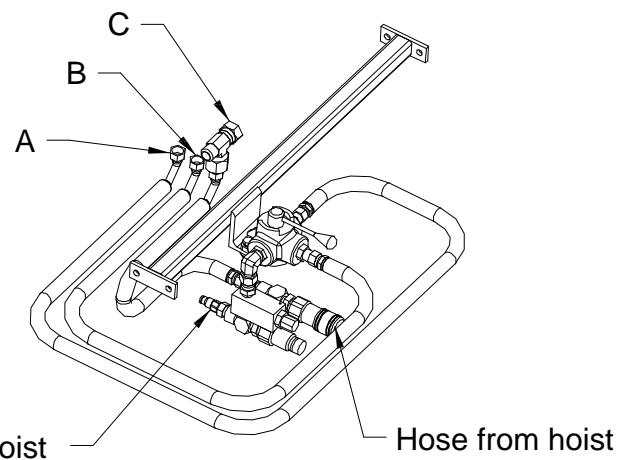


Fig.5B

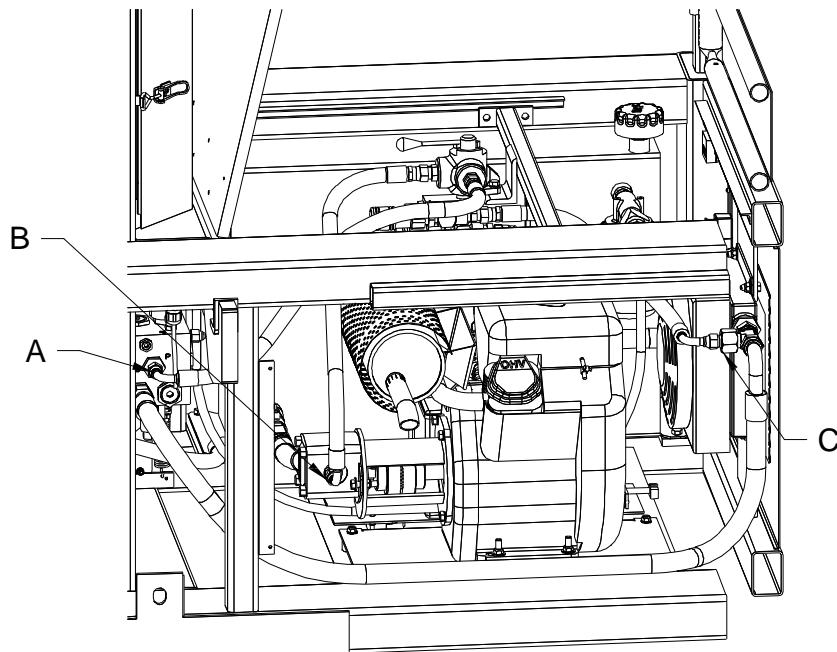
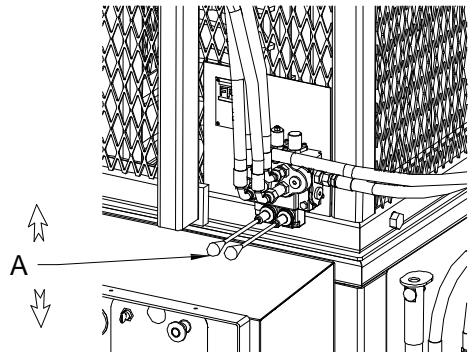


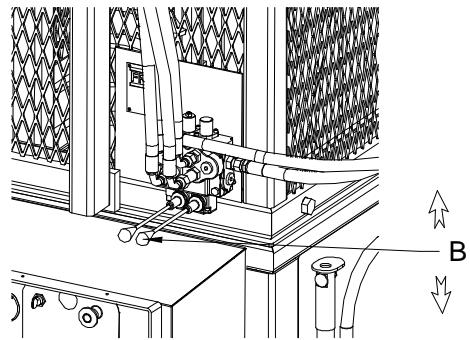
Fig.5A

Operating the control arms

- 1- Raise the left arm (A) to move the boom from right to left.
- 2- Raise the left arm (A) to move the boom from left to right.
- 3- Raise the right arm (B) to move load from ground to the top.
- 4- Raise the right arm (B) to move load from top to the ground.



Det. 6



Det. 5

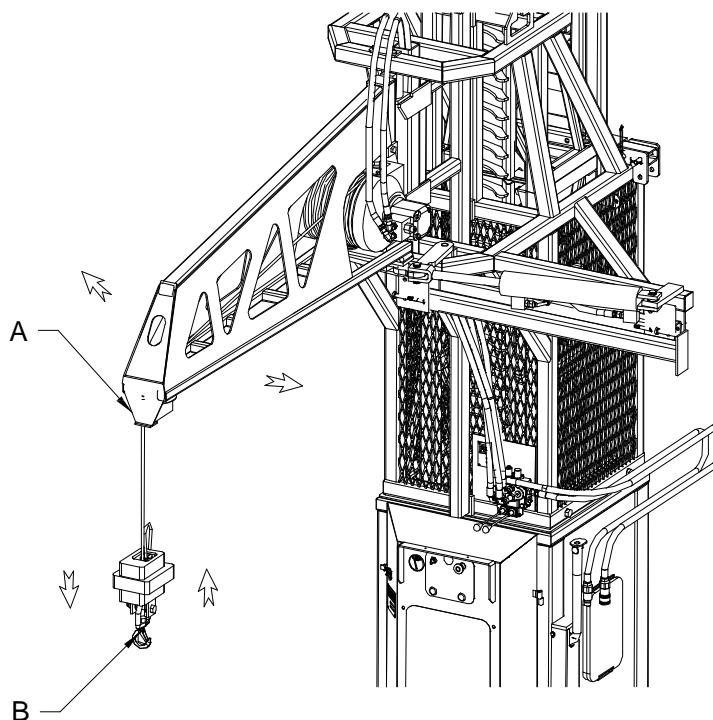


Fig.6

Loading area on the platform

The loading area is located on each side of the elevating unit

1- It's important to spread the load on the platform.

*2- Refer to the user's guide to spread the loads.

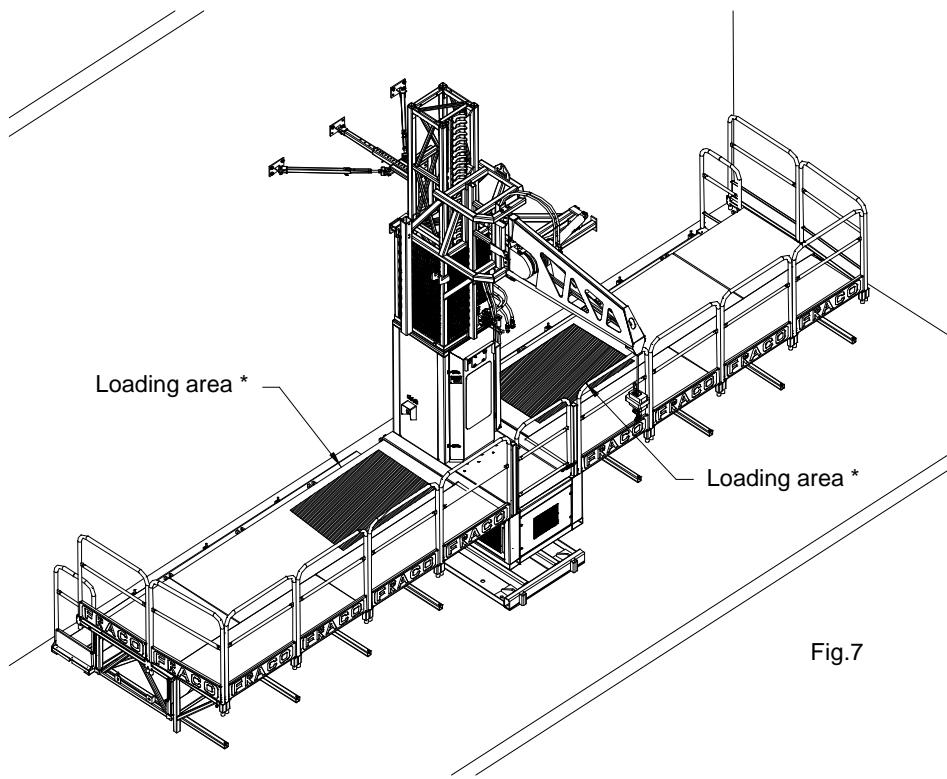


Fig.7



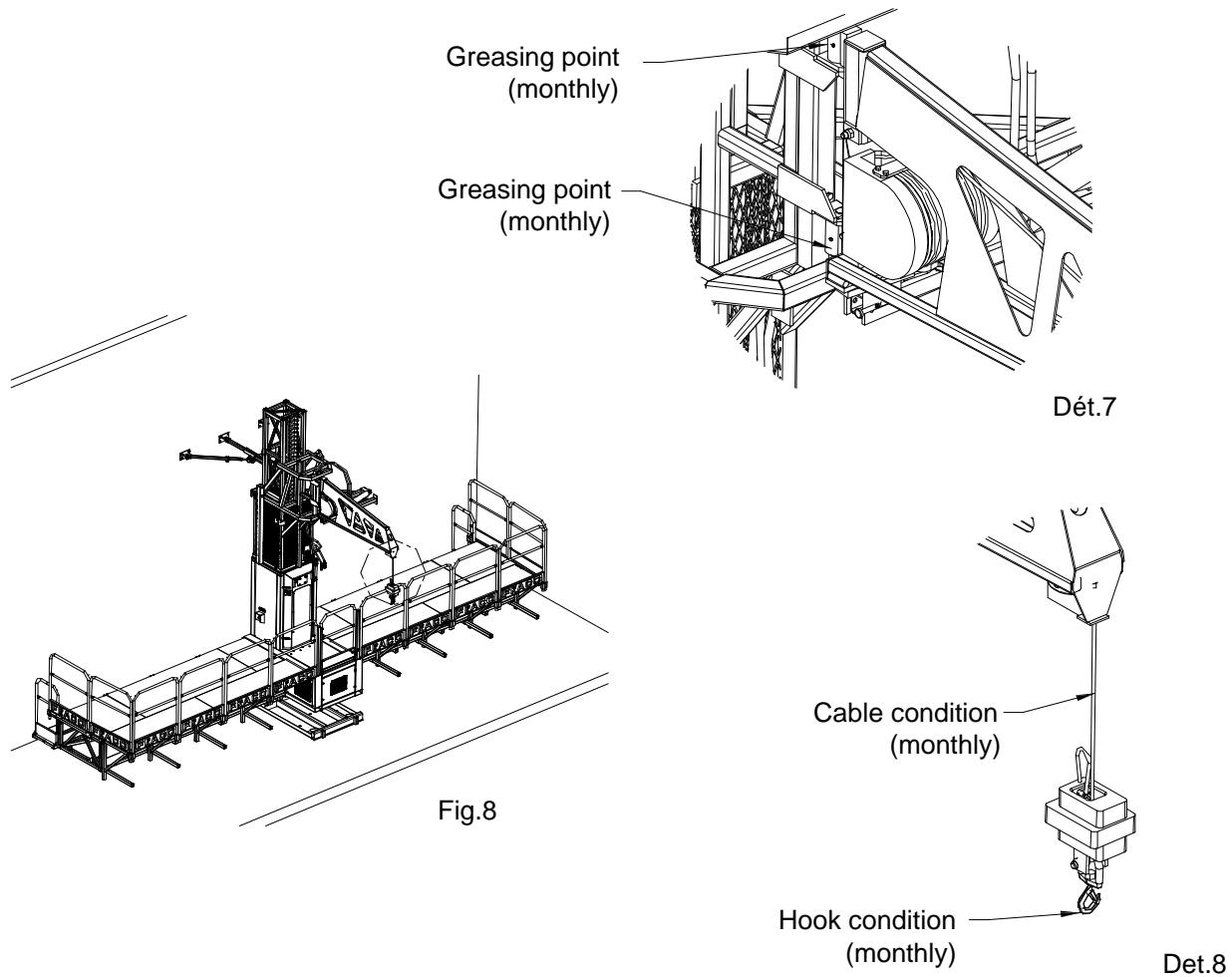
Part III

Maintenance

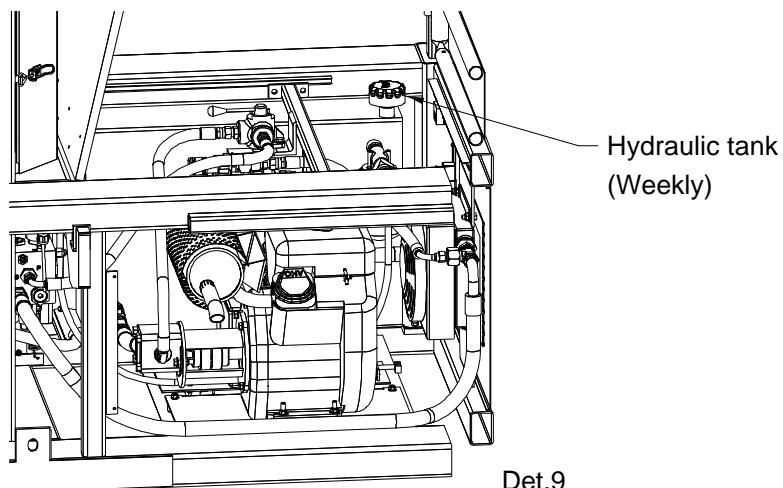
In this section:

- Monthly & weekly maintenance..... III-1
- General maintenance program..... III-2

Monthly maintenance



Weekly maintenance



Maintenance

IMPORTANT NOTICE

The frequency and the importance of the maintenance depend on the national codes, the builder's specifications, the operating conditions and frequency of use. Normally, it is not necessary to dismantle parts for regular maintenance, except if there are doubts about reliability or safety. Removing hoods, opening inspection holes or lowering the platform to its transport position are not considered as dismantling operation.

Daily **Daily inspection sheet**

- ✓ Lock the motor support with a padlock to prevent any unauthorized intrusion;
- ✓ Check the level in the engine gas tank, having a capacity of 6 liters (1,5 gallon);
- ✓ Verify the level of the mast with a 1 m (3') level (both directions);
- ✓ Clean all deposits of cement or dry mortar that could hinder the proper operation of the platform.

Weekly

- ✓ Check the engine oil level; (10w30);
- ✓ Grease at the locations indicated by the stickers;
- ✓ Check the hydraulic pipes for leaks;
- ✓ Check the spring condition on the unit;
- ✓ Check for any metal distortions on parts such as extensions, mast sections, base, hooks, etc. which could have been damaged by improper handling

Monthly **Preventive maintenance sheet**

- ✓ Verify hydraulic oil level (SAE 32 or HVI 36)

Annual

- ✓ General painting or Retouch places exposed to rust.